King County Executive
RON SIMS

March 16, 1999

Dear Citizen:

The salmon—and the waters in which they live—define our quality of life in the Puget Sound Region. In King County, we have a long history of environmental protection, and, since 1987, we have been working to preserve salmon and their habitat.

Last year, the National Marine Fisheries Service announced that the Puget Sound Chinook salmon would be proposed for listing as a threatened species. This announcement served as a wake-up call for all of us, bringing to our attention that the salmon, their habitat, and our environment are in peril.

This is the first time in history that a large urban area—such as the area encompassed by the counties of King, Pierce and Snohomish—will feel the impacts of an Endangered Species Act listing. To conserve the species, the federal government will issue rules that may affect what citizens can do with their land, how we use water, and how we conduct the routine activities that support our urban society.

Our choice was clear. The region needed to develop an aggressive response that recognized the challenge of recovering species within a complex urban environment. In short, we could not wait for others to act.

My colleagues, Snohomish County Executive Bob Drewel and Pierce County Executive Doug Sutherland, and I accepted responsibility for convening regional stakeholders to develop a coordinated response to the salmon listing. In February 1998, we formed a Tri-County partnership that includes representatives of federal, state, tribal and local governments; representatives of businesses and environmental groups; and citizens.

Through this collaborative effort, we are working to set aside policy differences under the mutual interest of long-term salmon recovery. This is the largest, most comprehensive cooperative effort ever undertaken in the history of this region. We have created an approach to conserve salmon, sustain our vibrant economy—and control our own destiny.

KING COUNTY COURTHOUSE 516 THIRD AVENUE, ROOM 400 SEATTLE, WA 98104-3271
(206) 296-4040 296-0194 FAX 296-0200 TDD E-mail: ron.sims@metrokc.gov

The Tri-County partnership is developing a comprehensive, science-based recovery plan that identifies immediate actions and commits to long-term conservation plans that will lead to recovery of the chinook salmon, while maintaining our region's economic vitality and strength. This document provides a summary of King County's approach.

Our response includes early scientifically based projects to protect, preserve, and restore critical habitat to ensure a properly functioning ecosystem to support salmon. New regulations and enforcement will improve land use activities, and various voluntary programs will encourage landowners to protect critical habitat on their land.

Our work is now just beginning. It will take many years, even decades, to accomplish the work of recovering chinook salmon in Puget Sound. Government actions are part of the solution, but our success depends upon gaining full public support and active citizen involvement in salmon conservation.

Our goal is recovery of the salmon. However, our ultimate purpose is to restore our environment so that we may provide for the co-existence of people and fish in the Pacific Northwest.

Sincerely,

Ron Sims
King County Executive

cc: The Honorable Bob Drewel, Snohomish County Executive
The Honorable Doug Sutherland, Pierce County Executive
Bruce Laing, Tri-County Endangered Species Act Coordinator
Tim Ceis, Director, Endangered Species Act Policy Coordination Office

Return of the Kings: An Executive Summary

Strategies for the long-term

conservation and recovery of

the chinook salmon

King County's Response Report

to the proposed Endangered Species Act listing

Submitted to the

National Marine Fisheries Service by

The King County Endangered Species Act Policy Office

March 16, 1999

King County
Endangered Species Act Policy Coordination Office
King County Executive
400 Yesler Way, Room 260
Seattle, WA 98104-2637

(206) 296-3784

For more information contact the Tri-County Salmon Information Center at
1-877-SALMON9 or http://www.salmon.gen.wa.us.

The Issue: Chinook Salmon Conservation and Recovery

Wild Pacific salmon have great cultural, economic and recreational importance in the Pacific Northwest. An abundant chinook salmon population is an indicator of a thriving environment. But the threat of extinction to the Puget Sound chinook salmon raises serious issues about the health of our region's environment and our future quality of life.

The listing of the chinook salmon as threatened under the federal Endangered Species Act (ESA) challenges the Puget Sound region to address the interacting factors that contribute to the decline of our native salmon. Our goal must be the long-term recovery of salmon to not just sustainable, but harvestable levels while maintaining the region's economic vitality and strength.

In anticipation of the ESA listing, King County has been working for the past year in close partnership with Pierce and Snohomish Counties, representatives of cities, state and tribal governments, and business, environmental and citizen groups. Known as the Tri-County response, it is a multi-jurisdictional partnership which produced a comprehensive, science-based recovery plan that identifies immediate actions and commits to long-term conservation plans that will lead to recovery of the chinook salmon.

The "Tri-County Initiative to Recover the Puget Sound Chinook" includes the conservation plan of each county and the cities within its boundaries. This multi-jurisdictional initiative for salmon restoration is the largest cooperative effort ever undertaken in our region's history. Through the Tri-County partnership, we have created a strategy to conserve salmon, sustain our economy – and control our region's destiny.

The King County contribution to the "Tri-County Initiative," entitled "Return of the Kings – Strategies for the long-term conservation and recovery of the chinook salmon," illustrates both immediate and longer-term commitments to salmon recovery through a description of past, continuing and early conservation actions.

King County has been at the forefront of efforts to protect salmon resources long before the listing of chinook under the ESA was ever considered. Beginning in 1987 with adoption of the first watershed basin plan and continuing with the acclaimed Waterways 2000 program that preserved more than 1,900 acres of critical salmon habitat, King County has pioneered environmental planning and protection in the state of Washington. King County's past and continuing actions include total acquisition of more than 29,000 acres of natural lands, and passage of environmental standards that protect salmon and critical habitat.

Early actions being proposed by King County include a comprehensive inventory of immediate improvements to environmental standards and practices, enhanced enforcement of existing regulations, habitat acquisition and restoration projects, and their funding status. In addition, King County convened a

seven-member panel of scientists and ecologists to review and assess programs, policies and regulations most relevant to the conservation of salmon (e.g. development regulations, basin plans, wastewater treatment program). Following its assessments, the panel worked with County department managers and policy staff to prepare recommendations for specific actions or further analysis directed toward improving protection of chinook salmon.

This executive summary is an overview of "Return of the Kings," the King County response report to the proposed ESA listing. The report was submitted to the National Marine Fisheries Services on March 16, 1999.

Our goals

Development of the King County proposal was shaped by the need to address three primary goals:

To provide for the conservation of threatened species and ecosystems upon which they depend.

Several factors are contributing to the decline of chinook salmon, from loss or degradation of habitat, to variations in ocean conditions. Salmon require high-quality environments from their freshwater spawning grounds in Puget Sound streams, to their migratory paths through major rivers, estuaries, and to the ocean, where they grow and mature before returning to their natal streams to reproduce. Thus, any recovery plan must address the range of environments through which salmon pass and the variety of habitats upon which they depend. Any aspect of an approach to the problems of salmon decline, whether political, social or scientific, must recognize the complexity involved in management of the ecosystem that supports the lifecycle of the chinook salmon.

Within the scientific community, there is a movement away from addressing the problem of salmon decline on a species-by-species basis, but rather toward a multi-species and ecosystem-based management strategies. The Endangered Species Act itself calls for an ecosystem approach as its principle goal. In section 2 of the Act, the purpose is made clear: "…to provide a means whereby the ecosystems upon which endangered and threatened species depend may be conserved, and to provide a program for the conservation of these species."

In guidance cited in the *Coastal Salmon Conservation: Working Guidance for Comprehensive Salmon Restoration Initiatives on the Pacific Coast* (NOAA 1996), the National Marine Fisheries Service describes the ecosystem approach in more detail. In this guidance, NMFS provides these five principles for ecosystem management that are central to salmon conservation:

- Maintain and restore natural watershed processes that create habitat characteristics favorable to salmonids.
- Maintain habitats required by salmonids during all life stages from embryos and alevins through adults.
- Maintain a well-dispersed network of high-quality refugia to serve as centers of population expansion.

- Maintain connectivity between high-quality habitats to allow for re-invasion and population expansion.
- Maintain genetic diversity.

The implication is clear: The conservation of salmon requires the conservation of their ecosystems.

To afford King County and its cities the predictability and legal protections necessary to carry out its responsibilities as a local, general-purpose government.

After listing the chinook as threatened under the ESA, the federal government, through the National Marine Fisheries Service (NMFS), will adopt a regulatory rule leading to recovery of the species. One option NMFS can take is to adopt a rule, pursuant to Section 4(d) of the ESA, that simply prohibits "take" of the species. Under Section 9 of the ESA, a take is defined as any actions that harass, harm, pursue, kill, collect, or modify the habitat to impair essential behaviors including breeding, feeding or sheltering of any threatened species.

A general prohibition of take could throw a legal cloud over many government activities ranging from land uses to construction permitting, to water supply and road maintenance. In response, government and private sector resources would be spent on legal strategies instead of investing in collaborative approaches to preserve and restore habitat and improve water quality and quantity. King County does not believe it is in the best interests of this region, the federal government, or the salmon, for NMFS to issue such a general prohibition.

Instead, King County and its regional partners are asking NMFS to accept the Tri-County proposals and include them in a complex 4(d) rule by recognizing our salmon recovery plans as a package of actions that, taken together, will lead to conservation of the species. This approach will provide an incentive for King County and our Tri-County partners to continue our commitment toward conservation and recovery of the Puget Sound chinook salmon.

To encourage the long-term recovery of the species to sustainable levels.

The salmon problem is complex and took many years to develop. Its solution will require a considerable commitment of time, money and effort. The successful restoration of habitat and protection of the estuaries, rivers and streams in which salmon live, will require that federal, state, tribal and local governments work together with private citizens to conserve the species. The Tri-County and King County responses depend on this collaboration, and a strategy of early and continuing conservation which, in combination with the long-term commitment of resources to watershed-based actions, will lead to recovery of the Puget Sound chinook salmon.

This report, in its totality, describes how King County meets the following criteria for a comprehensive salmon restoration strategy as defined by NMFS in the 1996 guidance document.

1. Identify at appropriate scales the factors that have contributed to the decline of the Evolutionary Significant Unit (ESU). *(Chapters 3 and 7)*

2. Establish priorities for action. *(Chapters 5,6,7 and 8)*
3. Establish explicit objectives and timelines for eliminating or reducing all major factors for decline and for achieving desired population characteristics. *(Chapter 7)*
4. Establish quantifiable criteria and standards by which progress toward each objective will be measured. *(Chapter 7)*
5. Adopt measures (actions) needed to achieve the explicit objectives. A plan should include measures to protect and restore habitat wherever habitat condition is a factor of decline, whether on private or public lands. (*Chapters 5,6 and 7)*
6. Provide high levels of certainty that the identified measures and actions will be reliably implemented, including necessary authorities, commitments, funding, staffing, and enforcement measures. *(Chapters 5,6,7 and 8)*
7. Establish a comprehensive monitoring program, including methods to measure whether objectives are being met and to detect population declines and increases in each ESU. *(Chapters 5 and 7)*
8. As much as possible, integrate federal, state, tribal, local, corporate, and non-governmental activities and projects that are designed to recover salmon populations and the habitats upon which they depend. (*Chapters 1,7 and 9)*
9. Utilize an adaptive management approach that actively shapes management actions to generate needed information. *(Chapters 2 and 7)*

Conclusion

The proposal we are making is substantive and will lead to conservation of the Puget Sound chinook salmon. By advocating for a complex 4(d) rule the Tri-County is not requesting a delay in the listing, and we are not advocating for a delay in the promulgation of a final rule. Instead, we are proposing the collaborative development of a 4(d) rule that recognizes the challenge of recovering salmon in a complex urban landscape and provides our region the flexibility to meet that challenge.

Inherent in this proposal is a recognition that this is a long-term endeavor, one that will never really be "finished." Our ultimate challenge will be to successfully alter past behaviors that impede our ability to long-term recovery of our salmon resources.

We believe that our proposal for a complex 4(d) rule is the only approach that will accomplish the goal of multi-species conservation plans to recover salmonids and bull trout in the Puget Sound region.

"…like the problem itself, solutions will be complex and often hard to agree on; to be successful they will need to be based on scientific information, including information provided by social and economic sciences. In addition, to be successful, consensus will be needed about the size of the investments to be made in solving the problem and how the costs should be allocated. This means that solutions will have to be regionally based, just as the salmon problem has regional variations."

— excerpted from the Executive Summary of "Upstream: Salmon and Society in the Pacific Northwest," National Research Council, 1996

Chapter Summaries

The following is a chapter-by-chapter summary of King County's response report to the proposed ESA listing, "Return of the Kings: Strategies for the long-term conservation and recovery of the chinook salmon."

Chapter 1: Introduction

King County can be proud of the tremendous strides it has made in the past to support and implement programs to protect our salmon resources. That list includes watershed basin planning, water quality programs, studies on the potential water reuse, the Cedar River legacy, open space and resource land purchases, Waterways 2000 and other important activities that protect our environment as a whole.

The benefits of these recent past efforts will not be fully realized for many generations of chinook salmon. However, it is the premise of the King County strategy that the beneficial impacts of its past actions, combined with early actions to conserve salmon and its commitment to long-term recovery strategies detailed in the response report, will gradually reverse the decline and lead to the recovery of the species.

Tri-County Proposal: Short-term and long-term strategies

The Tri-County proposal includes both short-term and long-term strategies that draw together the efforts at the Tri-County and watershed level. (Formally called Water Resource Inventory Areas (WRIAs), these areas were established in the early 1970s by the State of Washington for the purpose of resource planning and management. A WRIA essentially is an administrative unit that closely follows watershed boundaries. In the Tri-County area, there are six WRIAs: Stillaguamish, Snohomish, Cedar-Sammamish, Green/ Duwamish, Puyallup-White and Nisqually.)

Short-term strategies entail immediate, aggressive actions needed to protect the chinook salmon from further declines. These early actions include:

- Habitat protection and acquisition projects drawn from existing science-based plans and information;
- Increased use of the State Environmental Policy Act to better protect salmon habitat;
- Evaluation of programs and regulations to determine their effectiveness in contributing species conservation;
- Enhanced enforcement of existing protective regulations;
- Public education and involvement; and other initiatives.

These early actions come from both the work of individual municipal jurisdictions as well as coordinated efforts at the watershed level.

Over the long-term, the Tri-County effort is a coordinated, watershed-based salmon recovery strategy. It will be focused on implementing an adaptive management approach to conservation through the watershed conservation plans. Basing the long-term recovery plan upon watershed conservation plans will allow stakeholders to help shape the overall strategy and demonstrate a commitment to the long-term goal of species recovery. This outreach is critical in order to effect the changes in our cultural and institutional structures (e.g. political jurisdictions, public values, etc.) ultimately necessary to recover threatened and endangered species.

Coordinated with State of Washington

The Tri-County approach joins together with the State of Washington's draft statewide strategy to recover salmon, "Extinction Is Not An Option." The Tri-County approach also recognizes that the long-term effort to conserve and recover salmon cannot be successful without the involvement of the tribes, who have unique environmental, economic and cultural interests in salmon recovery

The chinook listing is anticipated to be followed in June by the United States Fish and Wildlife Service (USFWS) listing of the bull trout, and within a year or two, potentially by listings of the kokanee and coho salmon. Multiple listings will require coordinated rule making by NMFS and USFWS, under the ESA, to ensure consistency and a multi-species approach to recovery.

Chapter 2: Scientific and Management Approach

A dominant cause for the decline of salmon is the degradation of suitable habitat conditions during the freshwater and estuarine portions of the salmon life history. Many factors – scientific, institutional, political – have contributed to the loss of habitats and populations which are pushing salmon toward extinction.

The intent of this chapter is to discuss the changing scientific framework in regard to salmon management; to explore some of the challenges of restoring salmon within an urban environment; to describe the proposed management framework and goals of the Tri-County comprehensive conservation and recovery strategies; and to explain the factors that produced the Tri-County as the conservation area.

Within the scientific community, there is a movement away from addressing the problem of salmon decline on a species-by-species basis. Rather, an attempt is being made to move toward multi-species and ecosystem-based management strategies. King County's approach is intended to be ecosystem-based, multi-species and precautionary.

However, even if we employ the principles of ecosystem and conservation ecology, the urban area of Puget Sound presents an unusual challenge to the conservation and recovery of salmon. Much of the native landscape has been irretrievably altered and will require considerable intervention and management if wild salmon populations are to survive and flourish.

Still, some level of remediation is necessary even in those places where the urban landscape has eliminated the native one. In these places, the achievement of functional salmon habitat – even if some structural or process elements of the historic ecosystem cannot be restored – is necessary for salmon survival. *(See Chapter 2 for details on the County's priorities for restoration and rehabilitation.)*

King County intends to tackle these challenges by using an "adaptive management" approach. Adaptive management is defined as "the periodic reappraisal of management goals and activities based on information gathered explicitly to test these goals and activities." In short, this means that salmon conservation activities are treated as experiments with explicit objectives and predicted outcomes. Indicators of the outcomes are selected and assessment questions devel-

oped. The information gathered during the assessment is used to modify the management activity and, if necessary, pose new management strategies.

The goals of the management approach are simple. They are intended to apply in the order listed and to establish a firm foundation for both conservation and recovery. All actions proposed for salmon conservation and recovery fit into one of the categories below.

1. **First, do no harm.**

   Reduce and prevent harm by abandoning, modifying or mitigating existing programs, projects and activities.

2. **Conservation**

   Protect key watersheds, landscapes, and habitats by acquisition, regulation or voluntary action.

3. **Remediation**

   Restore, rehabilitate and enhance damaged habitats to complement conservation actions.

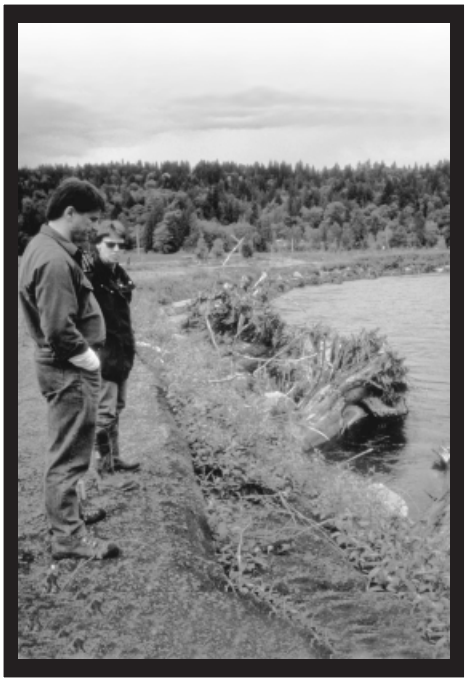
4. **Research**

   Fill critical gaps in scientific and institutional information.

Chapter 3: Factors for the Decline of Chinook Salmon

Chinook salmon in King County are affected by a wide and complex array of natural factors operating at both local and far-ranging scales. Human actions, however, can strongly modify these natural cycles and disturbance regimes, and often exacerbate adverse consequences associated with them. Human actions also result in a host of additional problems, such as over-fishing, migration blockages, introduction of non-native species, hatchery interactions, and reductions in the quantity and quality of physical habitat, water quality and flow.

The Tri-County approach of watershed-based planning will evaluate the specific factors for decline and restoration needs in each watershed.



Chapter 4: Legal Authorities to Contribute to Conservation

This chapter outlines King County's legal authorities most relevant to advancing environmental protection, including protection of wildlife habitat. These authorities are expressed in King County's many existing ordinances, codes and regulations. This chapter demonstrates to NMFS that the County has the legal authority to enact the early actions it is proposing to undertake.

King County Specific Authority/Programs

In general, the County has broad legislative and regulatory authority granted it by state law as a "Home Rule" charter county. More specifically, many of the County's proposed early actions to conserve salmon are associated with specific standards governing land development within the unincorporated areas of King County. These portions of King County tend to be its least developed areas, so that regulation of the unincorporated landscape offers greater opportunities to protect existing, higher quality salmonid habitat.

Through three key Development Standards – Sensitive Areas Ordinance, Clearing and Grading Code, and Stormwater Management (Surface Water Runoff Policy and Surface water Design Manual) – the County is able to impose many significant controls on land development.

Sensitive Areas Ordinance: This ordinance gives the county the ability to implement the goals and policies of the Washington State Growth Management Act and the King County Comprehensive Plan, both of which call for protection of the natural environment and the public health and safety. Sensitive areas covered by this ordinance include areas that are important salmon habitat, such as streams, wetlands, erosion hazard areas, landslide hazard areas, steep slopes, and flood areas. Development proposals affecting streams, for example, must observe minimum buffer widths determined by the class of stream involved. Further, the ordinance obligates the County to apply the most protective regulations available.

Clearing and Grading Code: The purpose of this code is to regulate the clearing and removal of vegetation, excavation, grading and earthwork construction including cuts and fills, gravel pits, dumping, quarrying and mining operations within King County in order to protect public health, safety and welfare. Enforcement of this code allows the County to minimize the impacts upon salmon habitat.

Stormwater Management: The purpose of these provisions is to provide for the comprehensive management of surface and storm waters and erosion control, targeted at preserving and utilizing the many values served by King County's natural drainage system, including open space, fish and wildlife habitat, recreation, education and urban separation.

In addition to these key Development Standards, there are many other programs (e.g. regulation of public water and sewer systems, regulation of sewage systems, road operations and maintenance) that provide protection for the environment and wildlife.

While the County does not regulate development activities within incorporated areas, many King County cities have adopted the County's development standards, or ones that are substantially similar.

State Programs/Legislation Implemented by King County

Three key state programs implemented by King County are valuable tools for ensuring protection of the natural environment, including water quality and quantity. These are the Growth Management Act, the Shoreline Management Act and the State Environmental Policy Act.

Growth Management Act: The GMA was enacted in 1990 to coordinate and plan for growth, while also providing for the conservation and wise use of land, the protection of the environment, healthy economic development, and the preservation of the health, safety and high quality of life of the state's citizens. Specific statutory goals of the GMA include reduction of development sprawl, preservation of open space to conserve fish habitat, and protection of the natural environment, including water quality and quantity. To achieve these goals, the GMA offers many important tools that require coordinated land use planning throughout the Puget Sound region. The County will continue to fully utilize those tools.

Shoreline Management Act: This law seeks to protect and manage the shorelines of the state, and covers all shorelines of the state and their associated shorelands. The County's Shoreline Master Program contains the local development regulations to enforce this law in King County.

State Environmental Policy Act: This law obligates the County to integrate environmental considerations into its planning and decision-making processes. The law also grants the County substantive authority to condition or deny proposals based on identified environmental impacts. The County proposes to expand use of SEPA to protect salmon habitat. *(See the summary of Chapter 5 for details related to SEPA as an early action)*

Federal Programs/Legislation Affecting King County

The County is obligated to comply with federal environmental laws, many of which have aspects affecting salmonids and their habitat. For example, pollution control and hazardous waste clean-up statutes affect the quality of regional waters. In addition to the Endangered Species Act, the federal Clean Water Act is the most important federal statute obligating and authorizing County actions relevant to salmonids and their habitat.

Clean Water Act: The purpose of this law is to restore and maintain the chemical, physical and biological integrity of the nation's water. The Act includes three programs directly related to the County's role in conserving salmonids and their habitat: Establishment of effluent standards for discharge of pollutants, establishment of state water quality standards, and the National Pollutant Discharge Elimination System permit program to control pollutant discharges. The County has accepted its obligation to implement Clean Water Act and state water pollution control statutes.

Chapter 5: Conservation – Past, Continuing and Early Actions

King County and its cities have long been in the forefront of planning to proactively manage growth so that economic development is encouraged, sensitive environmental features are protected, and a sense of community is retained and fostered. The County's past efforts provide a strong base of conservation accomplishments upon which to build.

Conservation Policy

Starting with VISION 2020 – a regional planning process initiated in 1987 by the Puget Sound Regional Council – to development of Countywide Planning Policies and the King County Comprehensive Plan in order to implement the GMA, King County has established a clear vision of how it wants to manage its growth. That strategy encourages most future growth to be concentrated into urban areas to protect rural and resource lands. The urban areas are further designated into urban centers to capitalize on the use of existing infrastructure, create opportunities to make our transportation system more efficient, and better leverage investment dollars. The King County Comprehensive Plan provides policy guidance for managing growth in unincorporated King County. Protecting and restoring air quality, water resources, soils, and habitats are among the County's primary goals.

Past and Continuing Salmon Conservation Programs

Over the years, King County has undertaken major efforts to protect salmon resources. These include watershed basin planning, water quality programs, monitoring, scientific research, studies on the potential use of water reuse, and open space and resource land purchases. Local governments in King County have developed plans to protect rivers and control stormwater in five major watersheds. We have implemented new regulations to improve protection of waterways, and have offered incentives to landowners so they will voluntarily protect critical habitat on their lands. We are undertaking a large-scale public involvement and information effort to ensure that our citizens understand the importance of restoring the salmon runs and safeguarding our water supplies.

The following are some highlights of those efforts:

Watershed Basin Planning: The county's Basin Planning Program began in 1987 to evaluate current and future conditions in drainage basins within the unincorporated lands in the urbanizing western third of King County and to evaluate and propose management plans for the surface waters in the basins. They are scientifically based, inter-disciplinary plans for the comprehensive management of surface water resources in the basins.

Seven basin plans were completed before the program ended in 1995 after it was concluded that development of comprehensive basin plans by King County was no longer appropriate, given the multi-jurisdictional nature of the majority of drainage basins in the county. It was recognized that a multi-governmental approach was needed to address issues across whole watersheds, and not just within single basins, in order to manage water quality, fish habitat and flooding. These recommendations led to the development of the inter-jurisdictional Watershed Forums and the development of the Regional Needs Assessment projects, programs and funding initiatives described in Chapters 7 and 8.

Habitat Restoration and Open Space Acquisitions: Under the Endangered Species Act, the highest priority of action is to conserve core areas of remaining, viable salmonid habitat and the watersheds critical to such habitat. Core salmon habitat and watershed lands can be permanently preserved through direct acquisition or purchase of conservation easements to provide the highest level of protection.

King County's resource land acquisition program efforts over nearly 30 years rival that of any metropolitan region in America. The programs have preserved some of the critical "core" elements of our regional natural lands systems. Since the early 1970s, King County and its cities have enacted several major land acquisition programs that permanently preserved open spaces, farmlands and riparian habitat. While each of these programs has had a different focus, most of these lands preserved riparian habitat or beneficial watershed lands.

King County and its cities have spent nearly $274 million to permanently preserve more than 29,000 acres of natural lands and critical habitat under the 1989 Open Space Bond, 1993 Conservation Futures Bond, and Waterways 2000. The other major public landowners in King County are the State of Washington, with more than 85,000 acres of state Parks and Forests, and the United States Forest Service with 337,000acres, and municipal watersheds controlling more than 94,000 acres of land. (See Table 1)

Early Actions to Achieve Salmon Conservation

Since March 9, 1998, when it was first proposed that the chinook salmon be listed as "threatened," King County has initiated a number of early actions that clearly provide benefits to chinook salmon and their habitat. Some of these actions have been reviewed and funded by the Metropolitan King County Council; some have been funded through current budgets, and are firm commitments; others may require legislative action and funding before they are implemented. In addition, King County departments submitted recom-

Table 1

Natural Lands Acquisition in King County-Since 1970
(3/1/99)

Programs	Amount	Acres Acquired	Funds Expended
COUNTYWIDE	Total	29,263	273,999,102
	Riparian	9,414	123,002,445
	Watershed	19,849	150,996,657
KING COUNTY	Total	26,542	162,769,776
	Riparian	7,660	71,665,774
	Watershed	18,882	91,104,002
CITIES	Total	2,721	111,229,326
	Riparian	1,753	51,336,671
	Watershed	967	59,892,655
ACQUISITONS BY WATERSHED			
Cedar/Lk. Washington	Total	7,166	138,108,603
	Riparian	4,548	60,849,016
	Watershed	2,618	77,259,587
Green River	Total	7,623	54,156,737
	Riparian	2,117	20,768,136
	Watershed	5,506	33,388,601
Puget Sound	Total	1,793	37,703,838
	Riparian	913	27,055,848
	Watershed	880	10,647,990
Snoqulamie	Total	10,779	36,797,895
	Riparian	1,836	14,329,445
	Watershed	8,943	22,468,450
White	Total	1,902	7,232,029
	Riparian		
	Watershed	1,902	7,232,029

Notes:

1. *Cities or other agencies did not review this list; This is preliminary information that can be updated.*
2. *The City totals included here reflect acquisitions from regional programs.*
3. *These figures represent information currently available to the King County RLOS Section.*
4. *This list likely represents much of the significant county and city open space acquisition activity in King County since 1970 to demonstrate the region's acquisition activity. There are, however, other acquisitions that are not reflected here.*

mended actions, and many more were the resulted from the Biological Review Panel through their systematic evaluation of County activities.

There are eight major early action initiatives that King County will undertake in 1999 and 2000 that are the cornerstones of our short-term response to the ESA listing:

- Monitoring
- Research
- Protecting and Restoring Habitat
- Improving Salmon Recovery through the County Comprehensive Plan

- Increasing Enforcement of Regulations
- Improving Protections for Sensitive Areas
- Increasing Review of New Development Proposals Through SEPA
- Improving Roads Maintenance Practices

Highlights of some of these initiatives include:

Habitat: King County and its cities will make a major commitment in its ESA response to protect and restore salmon habitat. This initiative will borrow on existing programs, such as Waterways 2000, which have already protected thousands of acres of essential habitat in the County. Looking ahead, there are three key elements to the County's habitat initiative: a watershed-based process to identify and prioritize habitat needs, a funding strategy to provide the needed funds, and processes to implement the projects.

Enforcement of Regulations: The framework of regulations and programs that King County has initiated to protect salmon is strong, but enforcement of regulations can be improved. In the 1999 budget, King County made a substantial, new commitment by authorizing eight additional code enforcement officers to enforce land use and development related regulations. This commitment is itemized in the Early Actions Matrix contained in Chapter 5 that details new staffing for enforcement activities, additional training for enforcement staff, and additional monitoring to determine compliance with permitting conditions.

The Early Actions Matrix summarizes actions proposed to address three major areas of King County responsibility: regulation of new development, provision of county services such as roads and wastewater treatment, and habitat improvements.

Improving Protections for Sensitive Areas: The Sensitive Areas Ordinance applies stringent standards across the entire unincorporated area, and is a fundamental element of stream protection in King County. In order to improve protections for salmon-bearing streams, King County is proposing to update the ordinance, increase enforcement of the regulations, and initiate an enhanced monitoring program to evaluate compliance and performance. Enforcement and monitoring are addressed in detail in the "Early Actions Matrix" in this chapter.

Increasing Review of New Development Proposals through SEPA: King County intends to undertake a comprehensive review of regulations relating to salmon and habitat through the watershed conservation planning processes. In addition, changes to regulations are likely to occur periodically as more intensive code review processes are undertaken and as conservation plans are completed.

In the interim, King County will evaluate its use of State Environmental Protection Act (SEPA) authority to impose additional conditions and mitigation on development proposals to further protect salmon habitat. This use of SEPA substantive authority is consistent with existing County policies, does not re-

quire changes to the state SEPA law, and can be accomplished within the general framework of permit review already in place. The County will develop any necessary changes to the County's SEPA ordinance to implement this proposal. The County will use this approach to protect salmon habitat as an interim tool, while it completes its long-term plan for recovery under the WRIA planning process. It is anticipated that the enhanced SEPA review described in the Chapter 5 Addendum will commence within the fourth quarter of 1999. *(This "early action" recommendation for SEPA is discussed in detail as an addendum to Chapter 5 of the report.)*

Improving Roads Maintenance Practices: In order to ensure that maintenance practices on King County roads provide adequate protection for salmon and habitat, the county is initiating a review of the King County Department of Transportation's Road Maintenance Best Management Practices Manual, Final Draft with the National Marine Fisheries Service.

Chapter 6: Biological Review Panel

King County convened a seven-member review panel of scientists and ecologists to begin an evaluation of its programs and policies most relevant to the conservation of salmon. The panel members all have expertise in salmon ecology, familiarity with salmon habitats in King County, and experience in project design, construction, impacts and mitigation.

The assessment was an initial, expert-based effort to review and evaluate existing programs administered by King County that may directly or indirectly benefit or hinder the conservation of salmonid species proposed for listing under the ESA. The assessments were based on written programmatic information provided to the panel by department staff, interviews with policy and technical staff, and the panel's experience with the various programs.

The panel reviewed the County's Sensitive Areas Ordinance, Clearing and Grading Code, Shoreline Master Program, and Surface Water Design Manual; the Cedar River, Bear Creek, Soos Creek, and East Lake Sammamish and Issaquah Creek Basin Plans; and the County's Wastewater Program. The panel evaluated the goals, objectives, implementation, monitoring, compliance and enforcement, interrela-

tionships and adaptive management elements for each regulation, basin plan or program. (The term "program" is used hereafter to refer generally to all of the above.)

The assessment by the panel was reviewed with the management and policy staff of the County departments responsible for the program's implementation. Together, the panel, department managers and policy staff prepared recommendations for actions, changes or further analysis directed toward protection of salmon and other species that may be listed as threatened or endangered.

The recommendations for actions are intended specifically to provide information to the National Marine Fisheries Service that may be useful in the development of protective regulations necessary, or advisable for the conservation of threatened salmonid species.

The full report provides detailed background discussions, and the panel's assessments and recommendations for each program, which are complex and interrelated. In general, the panel also evaluated a common set of implementation issues for each development regulation, including the adequacy of funding, staff resources, enforcement, compliance, evaluation, monitoring, and the use of variances and exceptions. Furthermore, the panel identified many interrelated issues between regulations and programs.

The panel review of basin plans began with evaluations of detailed written reviews prepared by King County Water and Land Division basin stewards. These reviews evaluated basin plan goals, accomplishments, strengths and weaknesses, and identified recommendations.

The panel made detailed recommendations specific to each plan as well as a general set of recommendations regarding all basin plans. Basin plans were completed over the span of years from 1987 through 1995. The earlier plans generally emphasized drainage issues, while the later plans were more sophisticated in also addressing salmon habitat issues.

The panel's recommendations common to all basin plans focus on issues related to funding, staff resources, implementation and enforcement of development regulations, monitoring. The panel concluded that basin plans, the work of the Watershed Forums, and other existing studies, can serve as important building blocks for WRIA-based conservation plans. *(See Chapter 6 and Appendix 6.3 for detailed information.)*

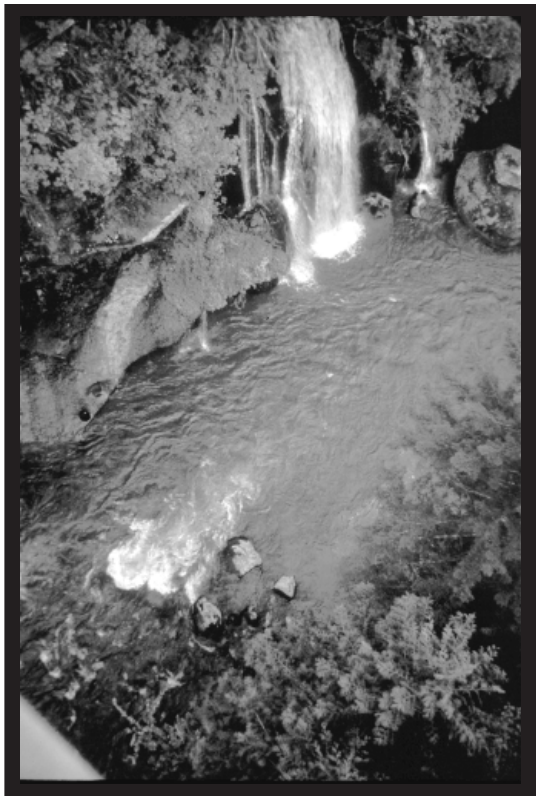
The panel offered strategies that it believes the County has authority to implement under state law or has a reasonable chance of getting such authority. These include both regulatory and non-regulatory approaches. The strategies encourage collaborative and adaptive management of a broad range of actions affecting salmonids and the ecosystem upon which they rely. These initial recommendations also address necessary authorities, commitments, funding, staffing and enforcement. In some cases, the County already has sufficient authority, staffing and funding to implement or continue strategies that are beneficial to salmon. In cases where the County currently lacks authority or resources to implement protective strategies, the King County Executive is committed

to seeking such authority and funding support as appropriate and within the County's financial means. In cases where necessary conservation actions can be undertaken successfully only in conjunction with other government and private entities, the County is committed to working with those entities.

It is the panel's opinion that implementation of some or all of these recommendations would allow King County to build on existing, successful programs to advance the conservation of threatened salmonid species. However, the panel's opinion and this report do not bind King County to implement any or all of these recommendations. Further, King County's failure to implement any or all of these recommendations does not necessarily constitute harm to threatened salmonid species.

Chapter 7: Proposed Salmon Conservation Planning Process

Conservation plans will form the backbone of King County's long-term efforts to meet the requirements of the Endangered Species Act. These plans will be developed and implemented at the watershed level through WRIAs within the Tri-County region. Each conservation plan will be science-based and include representation from the wide range of interests that reside, work and do business within the watersheds.



Pursuing development of long-term strategies at the watershed level allows King County to follow an ecosystem approach to recover and maintain chinook salmon. Further, this approach provides an effective and established base of inter-jurisdictional cooperation and knowledge on water issues, watershed planning, habitat restoration and salmon recovery issues that is unparalleled in the history of the Puget Sound area.

History of watershed planning

Water Resource Inventory Areas are defined under state regulations, and generally adhere to the watershed boundaries of major river or lake systems, such as the Snohomish and Green Rivers, and the Cedar-Sammamish basin which includes Lake Washington. Coastal and Puget Sound WRIAs include neighboring minor drainages as well.

These WRIAs have been designated the appropriate ecological and adminis-

trative units for developing data and prioritizing decisions that significantly affect salmon habitat. For this reason, local governments in the Puget Sound region – in cooperation with state and tribal governments and other major stakeholders – have determined that development of long-term conservation strategies should be at the WRIA level. WRIA-based salmon recovery plans will focus on habitat issues, but also will integrate with harvest and hatchery policies that state and tribal governments will determine for the entire Puget Sound region.

King County has lead responsibility for the development of salmon recovery plans in the Cedar/Sammamish Watershed (WRIA 8) and the Green/Duwamish Watershed (WRIA 9). In addition, King County is supporting the planning efforts in the Snohomish/Snoqualmie Watershed (WIRA 7), about half of which is within King County, and the White/Puyallup Watershed (WRIA 10), a small percentage of which is within King County.

The Tri-County Work Plan includes activities to facilitate the coordination of all watershed-based conservation plans in the three-county area. This approach also supports the Washington State Salmon Strategy, which calls for a flexible approach that includes statewide initiatives, regional and sub-regional initiatives, and local watershed management initiatives.

As described in Chapter 5, this approach is not the beginning of watershed-based planning and stewardship in King County. Existing watershed basin plans cover areas that are now included in the larger WRIAs and constitute a solid foundation on which to build WRIA salmon-recovery plans.

In 1995, King County's planning efforts transitioned from a basin planning approach to a new watershed process called the Regional Needs Assessment (RNA) for surface water management. King County, the City of Seattle and the suburban cities, voluntarily joined together to evaluate inter-jurisdictional management needs for surface water management in the major watersheds of King County

The RNA participants recommended that inter-jurisdictional Watershed Forums be developed to coordinate the regional management of water quality, flooding and fish habitat. The Forums were convened in 1996-97 and have worked for three years to evaluate the five major watersheds in King County (Central Puget Sound, Green/Duwamish, Lake Washington/Cedar, Sammamish, and Snoqualmie/Skykomish).

The Watershed Forums established an inter-jurisdictional structure for coordinating the management of shared surface water needs, including water quality associated with non-point sources, the protection and restoration of fish habitat, and the reduction of flood hazards in King County. The Forums also developed a set of policies to guide the expenditure of regional funds for surface water management, and identified approximately $250 million high-priority capital projects and programs and $12 million of annual operating and maintenance needs within the five watersheds.

Through these projects and programs, King County developed an information base and a record of management actions that protect and restore key

habitat areas and key attributes of the chemical and physical structure of the watersheds. RNA projects and programs also serve as an inventory from which many high-priority early actions for King County's ESA response have been selected.

Relationship to GMA

There is a close relationship between the conservation activities required by ESA listings, and growth management initiatives already underway at the state and local level in the Puget Sound region. Habitat is the one factor of decline that is primarily the responsibility of local government. Land use and development policies and regulations are the major tools to affect changes in habitat to promote recovery of the species. The Washington State Growth Management Act (GMA) provides much of the land-use and regulatory framework necessary to accomplish salmon recovery under ESA.

This year, King County is undertaking several GMA initiatives to update its land use policy and regulatory documents. These initiatives will incorporate changes to the structure, process, policy and regulatory frameworks to better support habitat restoration efforts. It is anticipated that the watershed conservation planning efforts will provide valuable information for these initiatives, which are briefly described below:

- **Countywide Planning Polices Update:** The Countywide Planning Policies define the countywide vision and establish the parameters for development of the comprehensive plans of King County and the 39 cities within the county. King County will encourage an evaluation and update of policies to promote salmon recovery countywide, including an analysis of how WRIA conservation plans could be implemented by the jurisdictions.
- **King County Comprehensive Plan 2000 Update:** King County will be improving the policy framework for protection and restoration of salmon habitat. It is anticipated that the WRIA planning process will both generate and respond to proposals to change land use and zoning as well as development regulations.

Goals and Overall Approach/Structure of the Plans

The overarching goal of Tri-County ESA Response Strategy is to "restore and maintain healthy salmon populations and protect the estuaries, rivers and streams on which they rely, based on best available science." The goals of King County's watershed planning efforts are the same as those described by NMFS in the guidance document for salmon conservation and recovery on the Pacific Coast.

The overall approach of King County's WRIA planning efforts is twofold:

- To establish a solid technical foundation based on best available science and incorporate research developed by the Washington Department of Fish and Wildlife and the Treaty tribes in each WRIA.

- To lead a multi-jurisdictional, multi-stakeholder process for identifying, assessing, prioritizing, selecting, and implementing specific actions to conserve chinook salmon.

Each WRIA plan will be based on analyses of factors limiting salmon survival in the WRIA, based on available science. The analyses will be conducted by a combination of King County staff, consulting support, and the technical committees and working groups established in each WRIA.

Each plan will:

- Specify actions necessary to aid the recovery of the species. These actions will generally be prioritized based on the relative importance of the limiting factors they address, their likelihood of success, and their cost-effectiveness.
- Identify key remaining uncertainties and information gaps, and research programs to address them.
- Contain an extensive monitoring program to allow for effective adaptive management.

In each King County-led WRIAs in the Cedar-Sammamish and Green/Duwamish Watersheds, a steering committee has been convened to guide the ESA response that represents a broad array of local governments, tribes, state and federal agencies, as well as representatives of business, environmental agencies, agriculture and timber interests. The planning efforts will be supported extensively by technical expertise and scientific research to fill the gaps in knowledge. An extensive public outreach and involvement program is included to increase public awareness and understanding through individual, community, and institutional involvement and action in support of salmon recovery.

Each of the King County steering committees has adopted an outline, following NMFS' guidance that includes timelines and milestones for specific actions.

Early Actions in WRIAs

King County and other jurisdictions and organizations within the Tri-County area are taking early actions toward salmon recovery and conservation. Following is a description of "early actions" proposed by the Steering Committees of WRIAs 8 and 9.

Cedar-Sammamish WRIA 8 Early Actions:

- *Education/Public Involvement.* This involves both inclusion of public involvement strategies while developing the plan and including basin residents in decision-making.
- *Basin Plan Implementation*
- *Acquisition Funding*
- *Floodplain Buyouts*
- *Passage improvements for juvenile salmonids at Ballard Locks*

- *Major restoration on lower Bear Creek*
- *Restoration on the Sammamish River and other habitats*
- *Research: Important research has begun through studies supporting a Habitat Conservation Plan (HCP) being developed by the King County Wastewater Treatment Division.*
- *Ecosystem Restoration Studies*
- *Lake Washington Ecological Studies*

Green/Duwamish WRIA 9 Early Actions:

- *Programmatic Review:* Individual jurisdictions within the watershed plan will review and evaluate their programs, similar to the process conducted by King County (see Chapter 6).
- *Education/Public Involvement*
- *Watershed Forum and Ecosystem Restoration Study Processes*
- *Conservation Actions*
- *Remediation Actions*
- *Research:* King County is conducting the Green/Duwamish Watershed Water Quality Assessment to develop a water quality model of the Green/Duwamish River, its tributaries, and Elliott Bay. There also are a number of immediate GIS updates that are about to take place, incorporating aerial photography, that will provide information needed to develop and complete the WRIA 9 conservation plan.

Chapter 8: Funding and Implementation

King County has made substantial funding commitments to salmon in the past and has allocated considerable funds in its current budget. King County is committed to an aggressive strategy to fund future projects and programs related to salmon recovery. This chapter describes past, current, and future funding efforts.

Past Commitments

Over the past decade, King County has spent more than $195 million for salmon-related projects and programs. This includes:

Planning: More than $11 million to fund a variety of plans focused on salmon habitat needs and priorities, including basin plans for five major stream and river basins, habitat inventories, and detailed studies.

Land acquisitions. More than $160 million for acquisition of riparian and upland habitat that directly benefits salmon.

Habitat restoration. More than $19 million to restore habitat along salmon-bearing streams and rivers.

Public outreach. More than $2.8 million on salmon-related public outreach activities, including public education, volunteer events, stewardship and communications.

Intergovernmental coordination. More than $4.9 million in the last five years to establish and support the Watershed Forums and WRIA Steering Committees to convene local governments and other interests to address salmon issues.

Current Budget

King County has allocated more than $15.4 million in funding in the 1998 and 1999 budgets to initiate watershed conservation planning, to implement the first round of land acquisition and habitat improvements, and to build a funding strategy to meet long-term needs.

Future Funding

In anticipation of major ongoing costs associated with the ESA response, King County has devised an aggressive fundraising strategy that includes the following initiatives:

- Pursuing the creation of a new countywide funding source through the Regional Needs Assessment.
- Building interlocal funding partnerships via the Watershed Forums and other watershed alliances.
- Applying for state funds through existing grant programs.
- Working with political leaders to create a sustained, dedicated, state funding source for salmon recovery.
- Supporting an earmarked federal appropriation to coastal salmon recovery in FY 2000 and beyond.
- Diversifying the federal strategy by opening Corps of Engineers and EPA conduits for funding.
- Building partnerships with private entities through corporate co-sponsorship of salmon projects.
- Exploring the creation of habitat banks with regulators and the regulated communities.

Chapter 9: Seattle, Bellevue and other Cities of King County

The Tri-County effort encompasses all the municipal jurisdictions of King, Pierce, and Snohomish Counties. In King County that includes 39 cities, many of which are participating in the WRIA process. In preparing a response to the listing of Puget Sound Chinook under the ESA, each jurisdiction was invited to submit a description of current or early actions it believed would conserve the species.

The documents provided by each city as well as the Port of Seattle are included in the King County response as they were prepared by that jurisdiction. The commitments and early action commitments of these cities should be considered as integral pieces of the overall conservation strategy, and the contribution they make to recovery of chinook salmon should be evaluated in the context of the entire Tri-County response.

This chapter includes submittals from: Seattle, Bellevue, Kent, Shoreline, Renton, Kirkland, Auburn, Burien, SeaTac, Tukwila, Normandy Park, Duvall, North Bend, Snoqualmie, and the Port of Seattle.

Acknowledgments

KING COUNTY EXECUTIVE

The Honorable Ron Sims

METROPOLITAN KING COUNTY COUNCIL ENDANGERED SPECIES ACT COMMITTEE

Louise Miller, Chair, Metropolitan King County Council

Larry Phillips, Metropolitan King County Councilmember

Dwight Pelz, Metropolitan King County Councilmember

Pete VonReichbauer, Metropolitan King County Councilmember

EXECUTIVE GROWTH MANAGEMENT SUBCABINET

Pam Bissonnette, Director, Department of Natural Resources

Greg Kipp, Director, Department of Development & Environmental Services

Barbara J. Gletne, Director, Department of Community & Human Services

Craig Larsen, Director, Department of Parks & Recreation

Pat Steel, Director, Budget Office

Paul Tolliver, Director, Department of Transportation

ESA POLICY COORDINATION OFFICE

Tim Ceis, Director
Jackie Kirn, Senior Policy Manager

Dennis Canty, GI James, Bruce Laing, Ikuno Masterson, Curtis Terry, Mike Wilkins

DEPARTMENT OF NATURAL RESOURCES

Kurt Triplett, Deputy Director
Nancy Davidson, Regional Water Resources Manager
Bob Burns, Lindsay Halm, Mark Isaacson

Water and Land Resources Division

Nancy Hansen, Manager
Steve Nicholas, Manager, Watershed Coordination Section

Debbie Arima, Anne Bikle, Curt Crawford, Luanne Coachman, Megann Devine, Bill Eckel, Bob Fuerstenberg, Wendy Gable, Linda Hanson, Ray Heller, Louise Kulzer, John Lombard, Gino Lucchetti, David Masters, Tina Miller, Doug Osterman, Laurel Preston, Joanna Richey, David St. John, Megan Smith, John Strand, Jeanne Stypula, Kelly Whiting, Ruoxi Zhang

Wastewater Treatment Division

Don Theiler, Manager

Greg Bush, Diane Concannon, Steve Gilbert, Karen Huber, Shirley Marroquin, Wes Sprague

DEPARTMENT OF TRANSPORTATION

Road Services Division

Harold Tanaguchi, Manager, Road Services Division

Tom Bertek, Kathy Brown, Jerry Creek, Peggy Dorothy, Chad Durand, Howard Haemmerle, Lydia Reynolds, Vicki Shapley

DEPARTMENT OF DEVELOPMENT & ENVIRONMENTAL SERVICES

Jim Ballweber, Mason Bowles, Claire Dyckman, Don Finney, James Hatch, Rich Hudson, Barbara Heavey, Susie Kalhorn, Mark Mitchell, Jeff O'Neill, Harry Reinert, Randy Sandin, Jeff Stern, Christina Tiffany

SPECIAL THANKS TO: John Briggs, Maggie Brown, Joanna Grist, Chuck Lennox, Andrew Marcuse, Mark Matassa, Marie McCaffrey, Leslie McLean, Andy Ryan, Mike Sinsky, Sally Thomas. Marla Williams, Karen Wolf, Quentin Yerxa, Connie Zimmerman.